

Notice of Allowability

Application No.

09/505,949

Examiner

Aimee J. Li

Applicant(s)

CHOW ET AL.

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE and Amendment received 31 August 2007.
2. ☒ The allowed claim(s) is/are 1-2 and 4-17 renumbered as 1-2 and 3-16.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

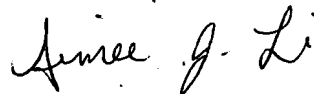
1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Joseph Lutz (Reg. No. 43,765) on 29 October 2007.
3. The application has been amended as follows:
 - a. Claim 1: A multi-mode processor comprising:
 - i. ...pre-processing hardware to bypass an arithmetic unit if a token exists in ~~[[the]]~~an input and the mode identifier indicates ~~[[the]]~~a second ISA mode...
 - ii. ...post-processing hardware to perform a token specific operation if ~~[[a]]~~another token exists in the input and bypasses the arithmetic unit to produce an output.
 - b. Claim 5: The multi-mode processor of Claim 1 ~~wherein the input may contain a token,~~ wherein the floating-point registers are 82 bits wide...
 - c. Claim 6: The multi-mode processor of Claim ~~[[3]]~~1 wherein...
 - d. Claim 9: A method in a multi-mode processor comprising:
 - i. ...when the mode the processor is in is a second word size ISA mode, bypassing ~~[[the]]~~an arithmetic unit to post-processing hardware to perform a token specific operation, the second word size ISA design for a

second processor having ~~[[the]]~~a second word size that defines the maximum number of bits that the second processor can handle as single unit...

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:
5. The claims, when taken in combination with each other, have not been taught, either individually or combination, by the prior art searched and found by the Examiner. Specifically, the independent claims now recite that the second ISA has a word size greater in bit length than the first ISA word size; there is a mode identifier and a token in the input that signal which ISA mode the processor is in; when a token exists in the input and the mode identifier indicates a second ISA mode, bypassing an arithmetic unit; and when a token exists in the input and the mode identifier indicates a first ISA mode, performing a token specific operation. This combination of limitation have not been taught by the prior art, either individually or combination with each other.
6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aimee J. Li whose telephone number is (571) 272-4169. The examiner can normally be reached on M-T 7:00am-4:30pm.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Aimee J Li
Examiner
Art Unit 2183

28 October 2007